



Architecture Breakout Session Summary Notes

caBIG Kickoff Meeting

February 19-20, 2004

This summary provides an overview of the key agreements in principle, discussion points, priorities and possible products for the Architecture Workspace - as discussed during the caBIG Kickoff Meeting breakout sessions. Further information on the Architecture Workspace activities will continue to be made available as the caBIG initiative moves forward. Please feel free to comment on these notes. If you are a registered caBIG participant and you have any comments or questions, please post them to the caBIG Forum at the following URL: <http://ncicbforums.nci.nih.gov/cabigforum>. If you are not a registered caBIG participant, please send any comments to adamsm@mail.nih.gov

Agreements in Principle

The Architecture Workspace agreed to address caBIG system architecture as a series of layered components. Each layer will contain a set of system functions, and an appropriate set of abstracted interfaces to the surrounding layers. In this way each component layer of the architecture can have some design flexibility, and technical risks associated with changes to a given layer can be minimized.

The following layers and components were identified:

- APIs, query interface, exposed data/metadata structures, grid service interfaces
- Model, metadata, management, data mappings, ID management, data and model change control
- Runtime technologies, service advertisement, execution of grid queries, messaging, workflow.

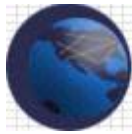
The group also identified two areas that will require uniquely focused attention in order for caBIG to be successful:

- Security/authentication/authorization patient ID, honest broker. This functionality needs to be part of the runtime environment, but the group felt that it should be addressed as a distinct set of requirements and may need special attention.
- Software development best practices, tutorials, testing, communications, standards adoption. The group feels these activities need to be part of the caBIG development landscape for all Domain Workspace activities.

Finally, the Architecture Workspace agreed that, at periodic intervals, a reference implementation that instantiates all the components should be constructed. These reference implementations should be drawn from pilot projects in the Domain Workspaces.

Will need some follow-up focused meetings. Look at using various technologies to keep in touch and stay on schedule.

Groups to form under technology thrusts (Consensus)



1. *APIs, query interface, exposed data/metadata structures, grid service interfaces*
 - a. API—definitions, how to query, how people interact with grid, how to interface/metadata define languages/how to interface
 - b. As data space grows how to manage new APIs
2. *Model, metadata, management, data mappings, ID management, data and model change control*
 - a. How to manage models, metadata, changes in models, data mapping
 - b. Identity management--people/entities
3. *Runtime technologies, service advertisement, execution of grid queries, messaging*
 - a. Run time--actual technology services; service advertisement, execution of grid queries
4. *Security/authentication/authorization patient ID, honest broker—functional requirements*
 - a. Security/authentication/authorization/master patient index (pt ID) (more functional level)
 - b. Definitive identification—you aren't supposed to get something unless you have the proper ID
 - c. De-identification
 - d. Much granularity is needed of data
 - e. Needs to leverage the other groups as well
 - f. The ability to filter who sees what
 - g. Honest broker
 - h. Annotation service
 - i. Technology
5. *Software development best practices, tutorials, testing, communications, standards adoption*
 - a. Software best practices/tutorial/communications/uphold standards (functional)
 - b. Coding and testing standards
 - c. Honest broker

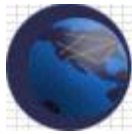
Frequency of meetings/subgroups within this Workspace:

- Quarterly meetings, teleconferences, and face-to-face
- Subworking groups
- Tech thrust and application thrust

Future Discussion/Action Items

Group comments raised include:

- Awarding of master contractor.
- Each area will have to have a meeting with Domain Workspaces. Should meet internally first. Should first meeting take place with Domain Workspace with one individual? Workshop with a few representatives from each Workspace talk to other Workspaces to determine when this would be appropriate.



- Each group should think about what their agenda is and a statement of what they are after. We should get some statements from them ahead of time. We'll need to mesh priorities of other Workspaces also with our group.
- Communication—Use Forum will need additional collaboration-ware (work with training group). Create separate subgroups/folders (5) and a general site. Extend Centra---Peter's action item.
- Quarterly meetings: aligning Quarterly meeting with reference implementation milestones—how frequently go through this---group felt it was too soon.

Other items:

- Description delineation of tech thrusts and workgroup processes across domains
- ID gaps
- ID tools for collaboration
- Training
- AI
- Sharing of slides
- Webmeeting
- How do we share our technology, knowledge intellectual capital example workshop web meetings, engineering best practices?

Agenda/tasks:

- Engagement tasks/Workspace prototypes structured communications recommendations
- Consultative coaching or support
- Evaluation of technologies on path to adoption
- Translate into a cookbook on how to do it all



Architecture Breakout Session Attendees
caBIG Kickoff Meeting
February 19-20, 2004

Facilitator: Peter Covitz/NCICB

Cancer Center Name	Representative Name(s)
Cold Spring Harbor	R. Michael Townsend
Duke University	Simon Lin
Fox Chase Cancer Center	Frank Manion
Fred Hutchinson Cancer Research Center	Rahul Joshi Mark Thornquist Derek Walker
Georgetown University - Lombardi	Arnie Miles Steve Moore
Holden Comprehensive Cancer Center	Ramon Lawrence
Memorial Sloan-Kettering Cancer Center	Ethan Cerami
Ohio State University - Arthur James Cancer Center	Tahsin Kurc Joel Saltz
Oregon Health & Science Cancer Institute	Vincent Yau
University of Chicago Cancer Research Center	Terry Disz Jay Lewis
University of Pittsburgh	Jim Harrison
Washington University - Siteman	Deepak Kapur Aditya Phatak
Wistar	Walt Mankowski
Patient Advocates	Name(s)
CARRA	Diane Paul
NCI Representatives	Name(s)
NCI	David Kane/CCR Joshua Phillips/NCICB John Qu/NCICB Himanso Sahni/NCICB William Sanchez/NCICB
caBIG Project Team Coordinators	Name(s)
Booz Allen Hamilton	Gwyn Smith

Workspace Working Group	Funded Members
Cross Cutting Workspace Working Group – Architecture	<ul style="list-style-type: none">• Cold Spring Harbor• Duke University• Georgetown University – Lombardi• Fred Hutchinson• Ohio State University – Arthur G. James/Richard J. Solove• University of Chicago• University of Pittsburgh• University of Wisconsin• Washington University – Siteman